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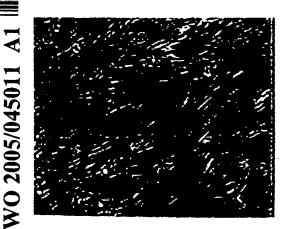
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(54) Title: METHOD OF ISOLATING AND CULTURING MESENCHYMAL STEM CELL DERIVED FROM CRYOPRE-SERVED UMBILICAL CORD BLOOD



(57) Abstract: The present invention relates to a method of isolating and culturing mesenchymal stem cells using cryopreserved umbilical cord blood that is most ideal for cell therapy. The method comprises thawing cryopreserved umbilical cord blood and adding αMEM (alpha-minimum essential medium) thereto, followed by centrifugation to harvest monocytes; isolating CD133 positive cells from the obtained monocytes; and subjecting the isolated cells into suspension culture in the αMEM containing Stem Cell Factor, GM-CSF (granulocyte-macrophage colony-stimulating factor), G-CSF (granulocyte colony-stimulating factor), Π₋₃ (interleukin-3) and IL-6 (interleukin-6).